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SOUTHERN PAIUTE AND NAHUATL—A STUDY IN UTO-AZTEKAN. PART II (CONCLUDED)

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Uto-Aztekan kw

UTO-Aztekan *kw* remains as such in Shoshonean and Nahuatl (written *qu* and *cu*), also generally in Sonoran; in Papago, however, it regularly becomes *p* (Uto-Aztekan *p*, as we have seen, becomes *v* or *w* in Papago). This Papago *p* is probably to be understood as *b*, as, according to Dr Mason, it appears in Tepecano as *b* (intermediate *p* when final). Examples of *kw* initially are:

- N. *qua* "to eat"; Cora *kwa*; Tar. *koa* (probably = *kwa*); Pap. *pah* "to swallow"; Git. *-kwa* "to eat"; Fern. *gwa*; Gabr. *kwa-a*; A. C. *qwaa*
- N. *quāuh-tili* "eagle"; Cora *kuólreabe* "Adler" (*kuo-* < **kwa-*); Tepecano *ba'āg* "eagle"¹; Hopi *kwa-hö* "eagle"; S. P. *qwān'á-nts* "eagle"; Ser. (H.) *gwa-tʰ*, *gwa-tš* "condor"; Cahu. *qwaa-l* "hawk (sp.)." Uto-Aztekan **kwā-* or **kwa'ā-*
- N. *cui* (i. e. *kwi*) "to take"; Pap. *pūi* "to take (sing. object)" (< **kwei*); Tepecano *bī*, preterit *bīi*: S. P. *qwīi-* "to take, pick up (sing. object)" (assimilated from **kwīi*).² Compounded with N. *cui* is *cecu* "avoir, prendre froid," with which is doubtless to be directly compared Pap. *hühpih* "to become cold" (< **sekwi*; **kwīi* when used absolutely, **-kwi* in compounds)
- N. *cuiloni* "sodomite": S. P. *kʷiʷi-tú-mpʰi* "anus" = *kwiʷi u-*
- N. *cuiila-il* "excrement"; Cora *tšuita* "Excremente von Menschen und Tieren" (< **kwita*; **kwi-* > *tšwi-*, cf. **ki-* > *tši-*); Pap. *pīhT* "manure" (< **kwita*); Tepecano *bīl*, preterit *bīB* "to defecate"¹; S. P. *qwītša* "to defecate" (< **kwita-*)
- Cora *kwasi* "der Schwanz der Tiere"; Pap. *pahhI* "tail" (< **kwasʰi*); Tepecano *bāiʰ*: S. P. *qʷiʷaʰ-si-φi* "tail" < *kwasʰi-*; Cahu. *suwet he-qwasqa* "star its-tail, comet"

¹ On Dr Mason's authority.

² This etymology is certain. My previous comparison of N. *cui* (misunderstood as phonetically *kui*) with S. P. *-qoi-* "to take off" (see p. 395 of Part I) is to be discarded.

In some cases Uto-Aztekan *kwa* (*kua*) seems to vary with *ko* (*ku*):

- N. *quāi-tl* "head" (in compounds *quā-*); Cora *ki-poá* "hair" (lit., "head-hair"; *ki-* < *ku-*); Tep. *ku-pa* "hair"; Pima *ko-pats* "hair": Tüb. *ko'o* "head"; Git. *-go-po* "hair"
- N. *quahui-tl* "wood, tree, stick"; Cora *kíyé(ri)* "Baum, Pfahl" (< **kuye-*); Huich. *kouhie* (= *kuye*) "bâton"; Tep. *kwawi* "wood"; Pima *kwak* (quoted from Kroeber), *kokaki* (given by Russel); Pap. *ku'A* "to get wood"; Tepecano *kua'G* "wood, to gather wood"¹; Hopi *ko-ho* "wood"; S. P. *q'w'a-p'i* (= *kuk'wa-*). Pap. *ku'A* and Tepecano *kua'-G* make it extremely likely that where *kwa-* occurs in these words we are dealing with original Uto-Aztekan **kua-* or **ku'a-*. This is remarkably confirmed by both Nahuatl and Southern Paiute. Original **kwawi-tli* (with accentual scheme ' ' ', see Part I) would have become N. **kwa-wi-tli* (in Spanish orthography **quáuh-tli*, not to be confused with *quāuh-tli* "eagle"); original **kuawi-tli*, **ku'awi-tli* (with accentual scheme ' ' ' '). had to develop to **kuawi-tl* (*-a-* could not become syncopated before *w*) whence, *u* losing its vocalic value, *kwawi-tl* (in Spanish orthography *quahui-tl*). Hence N. *quahui-tl* is only apparently opposed to our law of alternating stressed morae (see Part I, p. 419). As for Southern Paiute, original **kwa-* would have reduplicated to **kwak'wa-* (> S. P. **q'wa'qwa-*), while *kuk'wa-* < **kuk'ua-* is perfectly intelligible

Original *kui* has given rise to *kwi* in both Southern Paiute and Papago (where it further developed to *pi* > *p'*) in:

- Cora *kitsi* "Rauch" (< **kutsi*); Huich. *koutzi* "fumée" (i. e. *kutsi*); Pap. *kuPS* "smoke" (< **kuPIS* < **kukwi-ts* < **kuku(h)i-*, see Mono (N. F.) below); Mono (N. F.) *gukuhi-p* "smoke"; Wob. *gugui-p*; S. P. *kwík'w'aRi* (< **kui-* < **kuhi-*; note that value of two morae of original disyllabic **kui-* is preserved in S. P. *kwī-* by lengthening *i* to *ī*)

Uto-Aztekan s

Both *s* and *š* occur in Nahuatl, but I think it very likely that N. *š* (written *x*), aside from those cases where it can be shown to have developed from unvoiced *y* or *i* or from *s* originally followed by *i*-timbre,² always goes back to original *s*. In Southern Paiute, and other Shoshonean dialects, *s* and *š* are also to be kept apart, but here again I believe it likely that it will be ultimately possible to show them to have developed from one sibilant (in Southern Paiute *s* seems to stand regularly before *i* and *ɔ*; *š* before *i* and *o*; both *s*

¹ On Dr Mason's authority.

² See Part I, pp. 417, 418.

and *ʃ* before *a*, though *s* seems more typical). It is doubtless significant that N. *s* (written *c*, before *e* and *i*, and *z*, *ç*) corresponds to both S. P. *s* and *ʃ* and that N. *ʃ* (*x*) may correspond to S. P. *s*. It is further important to observe that Pap. has *h* or zero corresponding to both *s* and *ʃ* of Nahuatl and Southern Paiute. All this points to only one Uto-Aztekan sibilant (here assumed to be *s*) which in various dialects must have developed to *ʃ* under appropriate phonetic circumstances.

Examples of Shoshonean initial *s* corresponding to Nahuatl *s* are:

- N. *çali-ui* "s'attacher, adhérer à une chose," *çali-ui-ni* "gluant, visqueux": S. P. *san'á-p'í* "gum"
- N. *çolō-ni* "couler avec fracas, en parlant d'un torrent": S. P. *sāa-n'ia-* "to make a sound as of flowing water"
- N. *çoqui-tl* "fange": S. P. *soγo-* "mud" (with open *o*; probably to be understood as *sɔɣɔ-*)
- Pap. *hah* "to melt, thaw" (< **sā-*): S. P. *sā-* "to melt," *sa'ai-t'ui-* "to cause to melt"
- N. *izta-tl* "salt," *izta-c* "white" (lit. "salt-colored"): Cahu. *seta-xa-t* "salty"
- N. *çaca-tl* "paille, herbe, jonc": Cahu. *saxa-t* "willow"; Ser. (H.) *haka-t* "willow" (in all Serrano dialects Shoshonean *s*, *ʃ* regularly appears as *h* or *x*; cf. Papago)

Examples of Nahuatl (or Sonoran) initial *s* corresponding to Shoshonean *ʃ* (*s*) are:

- N. *çan* "only, but": S. P. *-šampa-* "only, except"
- N. *ce*, *ce(n)-* "one"; Huich. *che-oui* (i. e. *sě-wi*); Cora *se-* (according to Kroeber's data; Preuss gives *saž* "ein," cf. probably also *sen* "sicherlich"); Cah. *senu-*; Tepecano *hīma-tl* (< **sema-*): S. P. *šū-* "one (perhaps < **šuu-* < **šunu-* < **šinu-*; cf. Cah. *senu-*); Hopi *syu-xke*; Mono (N. F.) *šimu*; Mono (In.) *šiwī*; Tüb. *tšü-ts* (< **š-* ?); Luis. *su-pul*; S. J. C. *se-pul*. Compare also N. *ce(n)-* "entièrement": S. P. *šū-* "entirely, well" as verb prefix
- N. *cea*, *ceya*, *cia* "vouloir"; Tepecano *hōhi* "to desire" (< **sōhi*): S. P. *-šuya-*, *-šia-* (probably = *-šīya-*, cf. N. *ceya*) in *-γū-p' U-šuya-γwa-n'oa-* compound modal suffix "would that! I wish (he) had (done so and so) or would (do so and so)!" (*-γū-* irrealis; *-p' U-* probably perfective; *-γwa-* probably tense-modal element; *-n'oa-* modal element difficult to define; *-šuya-* is left to be assigned desiderative value)
- N. *izte-tl* "nail" (< **sute-*); Cora *šitē*; Cah. *sutu*; Pap. *hūTŠI* (< **suti*): S. P. *šitšū-* "nail" (< **šītu-*); Shik. *-šidu*; Tüb. *sulu-*; Gabr. *estšu-*; A. C. *-šul'u* (< **šut'u-*); Cahu. *sal'u*

¹ On Dr Mason's authority.

- N. *ce-tl* "glace," *ce-cui* "avoir, prendre froid," *ceui* "se refroidir"; Cora *sē* "es ist kalt"; Huich. *je-ri* "froid"; Pap. *hū-* (< **se-*) in *hūhpih* "to become cold," *hūum* "to be cold," *hūva'T*¹ "to become cool": S. P. *šī-* in *šī-p'a-y'a-* "to feel cold" (lit. "to die, -y'a-, of cold"; *šī-p'a-* probably identical with Pap. *hū-va-*), *šī-p'Ura-* "to be cold (e. g. ice)," *šī-t'u-* "to be cold weather"
- N. *cihuā-tl* "woman" (*çoua-tl* is given by Siméon as "forme rare"): S. J. C. *šonwā-l* "woman"; Luis. *šun-a-l*
- N. *cī-tlalīn* "star," *xīhui-tl* "comet" (perhaps dissimilated from **sūwi-* or **šūwi-*; cf. *cihua-tl*: *çoua-tl* above); Cora *šureabe*, *šuruabe* "Stern"; Huich. *šulawi* "star"; Tepecano *hūva*¹: Hopi *so-hö* "star"; Tüb. *šū-l*; Git. *hūu-tʰ* (< **sū-*); Luis. *šuu-la*
- Tar. *sula* "heart"; Tep. *hura* (< **sula*): Tüb. *šuu-na-* "heart"; Git. *-xūn* (< **sūna-*); Fern. *-hūn* (< **sūna-*); A. C. *-šun*; Cahu. *-sun*

Examples of postvocalic Uto-Aztekan (Nahuatl) *s*: Shoshonean *-s-*, S. P. *-s'-*, *-š'-* are:

- N. *aci* "atteindre avec la main, parvenir en un lieu"; Cora *as* "ankommen, anhalten," *asī* "angetroffen werden, sich finden"; Pap. *ai* (< **ahi* < **asi*) "to reach, overtake, pass": S. P. *'a'siā-* 'surface, outer covering' < *a'siā-* (?)
- Cora *kwasī* "der Schwanz der Tiere"; Pap. *pahhi* "tail" (< **kwas'i*): S. P. *q'wa'si-φi* "tail" (< **kwas'i-pi*)
- Cora *has* "älterer Bruder": Cahu. *pas* "elder brother" (cf., with *-tš-*, N. *āch-tli* "frère aîné")
- N. *tīša-tl* "terre ou poudre blanche," *tīce-uac*, *tīce-ctic* "blanc"; Pima *tāhai* "white" (< **tōsa-*); Huich. *toja*, *tousa* "blanc"; Cah. *tosa-li*: S. P. *tōš'a-* "white"
- N. *teci* "moudre le maïs ou autre chose sous la pierre"; Cora *tīše* "mahlen"; Pap. *tšui* "to grind" (< **tuhi* < **tusi*): S. P. *tuš'u-* "to grind seeds"
- N. *nēci* "to appear": S. P. *naš'i-m'i* "to seem, appear"

Examples of N. (Sonoran) *š* corresponding to Shoshonean *s* are:

- N. *xal-li* "sable, pierre qui se met en poudre"; Cora *se* "sand," *sā-ta* "auf dem Sande, sandiger Ort" (*se* and *sā-* may point to original stem **sea-*, cf. Cora *āka* "Wind": Huich. reduplicated *heheaca* "air"; this **sea-* or parallel **sia-* may lie back of N. *xal* < **sʰal-*): S. P. *sinwa-mphU-* "sand, gravel" (< **siwa-*). How Nahuatl-Cora **sea-*, **sia-* is related to S. P. **siwa-* is not clear
- N. *xix-tli* "excrément de l'homme," *ā-xix-tli* "urine" (< **siš-* < **sisʰ-* < **sisi-*; *šiš-* may here be due to assimilation of *s-* to *-š-*); Pap. *hi'I* "urine" (< **si'i*): S. P. *si'i-* "to urinate"

¹ On Dr Mason's authority. Dr Mason points out that Tep. *sia-vok*, given in Part I as cognate, must be rejected, as Uto-Aztekan *s* > Tep. *h*.

Huich. *schoure* "rouge" (i. e. *sū-re*); Cora *ta-ja-ri* "rouge" (Diguët), *ta-ša*, *ta-ša-ra*, *ta-ša-vin* "rot, rot-gelb" (Preuss); Tep. *souhe* "rouge" (i. e. *su-he*); Cahu. *sel-nekiš* "red" (Cahu. and A. C. *-nekiš*, *-nikiš* are suffixes for color terms; *se-l-* with suffixed *-l*, cf. A. C. *tu-l-nikiš* "black" and Cahu. *dewi-š-nikiš* "white"). Huich. *šu-*, Cora *ša-*, Tep. *su-*, Cahu. *se-* may point to Uto-Aztekan **s-*, **se-* (cf. doubtless also Pap. *hūht* "red face paint" < **se-*)

Uto-Aztekan (or Nahuatl-Sonoran) *s* corresponds to Shoshonean *tš* in:

N. *poča-ua* "s'enfler," *poča-ti* "manger avec excès"; Cora *huša*, *hušai* "gesättigt sein": S. P. *p^utša-* "to be filled up" = *put'ša-*

N. *ez-tli* "sang," *ečo-tl* "sang de l'homme": Ser. (H.) *-itš* "blood"; Git. *-ödž*. These Serrano forms probably point to Shoshonean **itš(o)-*. It is difficult to separate from Uto-Aztekan **eso-*, **elšo-* "blood" certain Luiseño-Cahuilla and Hopi forms: Cahu. *ewu-l* "blood," *-ew'* "blood of a person," *ew'i-l* "much blood"; A. C. *-ow'* "blood"; S. J. C. *-ou*; Luis. *-ou*; Hopi *üwwe*. These forms seem to point to Shoshonean **iwo-* or, with voiceless *w*, **iwo-*; how this is related to **iso-*, **itšo-* is not easy to see.

So far all Southern Paiute reflexes of Uto-Aztekan *s* have been seen to be some form of sibilant (*s-*, *š-*; *-s-*, *-š-*; *-tš-*). There are, however, a number of clear cases in which Uto-Aztekan postvocalic *s* is represented in Southern Paiute by ' (glottal stop). We may consider this glottal stop as developed from non-geminated postvocalic *s* (all cases of S. P. postvocalic *s* or *š*, as we have already seen, are geminated). Whether S. P. is here directly equivalent to Pap. zero (which sometimes appears as representative, instead of *h* or *hh*, of Uto-Aztekan postvocalic *s*) is difficult to say at present, though it does not seem likely (cf., e. g., Pap. *tšui* "to grind" < **tusi*: S. P. *tuš'u-* with Pap. *wui* "eye" < **pusi*: S. P. *pu'i-*). Examples of Uto-Aztekan *-s-*: S. P. ' are:

N. *ix-lli* "oeil" (< **isi-* < **pusi-*); Cora *hisi* "eyes" (< **pusi*); Tep. *buy* (i. e. *bui*); Pap. *wui*; Tar. *pusi-*; Cah. *pusi-*: S. P. *pu'i-φⁱ* "eye"; Shik. *-bui*; Mono *-buš*; Tüb. *puntsi-*; Luis. *-puš*; Hopi *bō'si*. Uto-Aztekan **pusi-*

N. *cochi* "to sleep"; Tep. *kosi*; Cora *kutsu*; Pap. *koi*; Tepecano *koc*, preterit *koī*: S. P. *qo'vi-* "to go to sleep (plur.)" (< **kōsi-*). Uto-Aztekan **kotši-*, **kōsi-*

¹ On Dr Mason's authority.

- N. *uetzi* "to fall"; Tepecano *gĩš* "to fall in the water" (< **wetši*), preterit *gĩĩ*: S. P. *wĩ'i*- "to fall" (< **wĩši*-, assimilated from **wĩsi*-). Uto-Aztekan **wetši*-, **wesi*-
- Pap. *viħħa* "penis" (if from Uto-Aztekan **wisa*- and not **pisa*-): S. P. *wĩ'á-p'* "penis" (* < *wisa*- ?)
- N. *xix-tli* "excrement" (< **sisi*-); Pap. *hi'ɪ* "to urinate" (dissimilated from **hii*- or **hihi*- ?): S. P. *si'i*- "to urinate"

Another example of S. P. ' < -s- is afforded within Shoshonean itself:

- Cahu. *gwaši-š* "ash": S. P. *qwo'á-t'iqá*- "to smoke" (lit., "to eat *qwo'a* = ashes ?") (< **kwoša*-)

Uto-Aztekan m

Uto-Aztekan *m* appears as such in Nahuatl (where, however, it becomes -*n* when final; also assimilated to *n* before *t*, *tl*, *ch*, *tz* and to *η*, written *n*, before *k* and *kw*), Sonoran, and Shoshonean. Examples of initial Uto-Aztekan *m* are:

- N. *mon-tli* "son-in-law"; Cora *mu* "Schwieger (-vater, -mutter, -sohn, tochter)," *muna-ra* "Schwiegervater": S. P. *mon'a-tsi*- "son-in-law"
- N. *metz-tli* "moon"; Huich. *metza* "lune"; Cora *matsa*- (from Kroeber), *máš-kirai* "mond" (Preuss); Tar. *metša*; Pap. *mahsa't*: Hopi *moya-wo* "moon"; Tüb. *müya-l*; Git. *müa-t'*; Fern. *moā-t*; Luis. *moi-la*; Cahu. *meni-l*; S. P. *mva*-; Mono (In.) *müa-ts*
- N. *mella-tl* "metate"; Huich. *mata*; Pap. *mah'tšuh*: S. P. *mará-ts* "grinding stone"; Luis. *mala-l*
- N. *māi-tl* "hand" (*no-mā* "my hand," *mā*- verb prefix "with the hand"); Huich. *mama*; Cora *moá-ka* "Hand" (Kroeber quotes *moa-ma*); Tar. *ma*-; Cah. *mama*; Tep. *ma*-; Pima *ma*-. S. P. *mó'v-φ* "hand," *ma*- verb prefix "with the hand" (*mó'v*- assimilated from **mó'a*-, cf. Cora *moa*- ?); Shik. *moo*; Mono (In.) *-maia*; Hopi *maa-t*; Tüb. *ma*-; Git. *-ma*; Fern. *-ma*; Luis. *-ma*; Cahu. *-mo*. It is not clear how S. P. *mó'v*- is related to S. P. *ma*-
- N. *maca* "to give"; Cah. *maka*; Tep. *maxe*; Pima *maka*; Pap. *mah* (< **maka*): S. P. *maɣa*- "to give"; Mono (In.) *maki*; Bank. *maha*; Git. *a-mak*; Fern. *maxa*; Cahu. *maxa*
- N. *mimiloa* "renverser, faire rouler une chose": S. P. *miŋqwā*- "(frightened animals) come out in one bunch"
- N. *min-tonlli* "arrière-petit-fils, -petite-fille": S. P. *mia'*- "small, tiny" Cora *ma*, *ma-n* "hier, dort," *ma-ka*, *ma-kan* "dort," *má-na* *má-naka*; Huich. *ma-na* "ici": S. P. *ma*- demonstrative stem "that (visible)"
- Pap. *mai* "to learn, know": S. P. *mai*- "to find, discover"
- N. *miec* "much"; Pima *moi* "many": Luis. *muyuk* "much"

Cora *mù* "Kopf," *mouhou* (Diguët) "tête" (i. e. *mu'u*); Huich. *moho* "tête"; Tar. *mo*- "head"; Pima *mo*- (from Kroeber), *mâ-ka* (Russell); Tep. *mo*- (from Kroeber), *mahou* (Diguët) = *ma'u*; Pap. *mo'o*: Tüb. *iso-m'o* "hair." Uto-Aztekan **mɔʔ*-

Postvocalic Uto-Aztekan *m* appears in Southern Paiute either geminated as *-m'*- or spirantized as *-ɨw-* (in Ute *-ɨw-* generally appears as *-w-* with nasalization of preceding vowel). Examples of elements appearing in both forms are:

- N. *-mâ* plural suffix (shortened to *-n* in *i-n* "these"; *o-n* "those"; *-qui-n* "them," plural form of *-c-*, *-qui-* "him, it"; *-ti-n*, plural suffix): S. P. *-m'v-* = *-m'i-* (< **m'e*), *-ɨwv-* (< **me*), animate plural suffixes (e. g. *'i-m'v-* "these," *'u-m'v-* "those," *'aya-m'v-* "turtles"; *nɨɨwv-ɨwv-* "persons")
- N. *amo-* "your (plur.)," *amê-huân*(tin) "you (plur.)," *an-* "you (plur.)," as proclitic to verb form (< **ame-*); Tepecano *am-* "your (plur.); you (plur. obj.).": S. P. *mʷvm'i-* "you (plur.)" as absolute form (*-m'i-* suffixed element, cf. *nɨ-m'i-* "we exclusive," *mʷv-*, with its peculiar labialized *m*, doubtless goes back to **im'i*, as shown also by cognate forms in other Shoshonean dialects), *-'...ɨwvm'i-*, *-'...ɨvm'i-* "your, you (plur.)" possessive and objective suffix, *-'...ɨwv-* "you (plur.)" subjective suffix (< **' me*); Git. *ümü* "you (plur.)"; Ser. (H.) *üma-m*; Cahu. *eme-m*; Luis. *omo-m*; Hopi *ömaa*

Examples of S. P. geminated *-m'*- are:

- N. *mo-* "thy," *mi-tz* "thee, to thee"; Cora *múa* "du": S. P. *-'...m'i-* "thy, thee" possessive and objective suffix, *im'i-* "thou" as absolute form (< **im'i-*, cf. Ute *im'i-*); Tüb. *-ɨ* "thy," *vm̃bi* "thou"; Ser. (H.) *mô-* "thy"; Fern. *mu-, mo-* "thy," *vm̃ü* "thou"; Luis. *om* "thou"; Hopi *öm* "thou." How these Shoshonean forms with nasal are related to forms without nasal (S. J. C. *o-* "thy"; A. C. *o'o* "thou"; Cahu. *e'e-* "thy," *e* "thou"; Mono (N. F.) *ü* "thou"; Shik. *ü*) is not clear. Apparently Shoshonean possessed two etymologically distinct elements: **mo-* "thy" (cf. N. *mo-*), **mi-* or **mi* "thy; thee" (cf. N. *mi-tz*); and **i-* or **i'i-* "thou" (morphologically, not etymologically, parallel to N. *ti-* "thou"). Forms like Luis. *om*, S. P. *im'i-*, Git. *ümü*, used as absolute forms for "thou," would then be compounded of subjective **i-* and possessive-objective **mi*.
- N. *toma* "to loosen, untie, open, deliver, set free": S. P. *tu'um'a-* "to pick up several things," *tûɨwai-* "to pick up what has been rejected" (< **tōmai-*) (?)

Examples of S. P. spirantized *-ɨw-* < *-m-* are:

- N. *tlan-tli* "tooth" (< **tlame-*); Huich. *tame*; Cora *tame*; Tar. *teme-*; Cah. *tami*; Tep. *-tamo*: S. P. *taɨwá-m̃p'i* "tooth" (< **tama-*); Mono

¹ Quoted on Dr Mason's authority.

- (In.) *-tawa* (*-w* < *-m*-, as in S. P.); Shik. *-dawa*; Tüb. *dama*-; Git. *-dama*; Fern. *-tama*; Luis. *-tma* "mouth"; Hopi *tama* "tooth"
- N. *tema* "mettre, déposer quelque chose en un lieu, remplir une chose de semence ou de terre": S. P. *tīḡwa*- "to cover up, close up (hole)" (< **tīma*-)
- N. *nemi* "to live": S. P. *nīḡwU*- "person" (< **nīmī*-); Ute *nuwi*- (< **nīmī*-); Mono (N. F.) *nūm*; Shoshone *nī^u* (i. e. *nīw*)
- N. *nema* "pied à pied, pas à pas": S. P. *naḡwa*- "track" (< **nama*-)
- N. *miqui* "to die": S. P. *tša-ḡwUk'i*- "to die off" (< **mīk'i*-)
- Huich. *tamejh* "nous"; Cora *ítan* "wir" (*-n* < *-m*-); Tar. *tame* "we"; Cah. *itom*; Tep. *atem*: S. P. *taḡwa*- "we" (< **tama*-); Shik. *ūdiḡwa*; Git. *itsam*; Luis. *tšam*; Cahu. *tšeme-m*; Hopi *ītamö*
- Cora *hemi*, *hemī-n* "vor, bei, in, zwischen, unter" (< **pemi* ?) post-positive element: S. P. *-vaḡwi*- "in" (< **-pami*-)

Uto-Aztekan *n*

Uto-Aztekan *n* is normally represented as such in Nahuatl (assimilated to *η*, written *n*, before *k* and *kw*), Sonoran, and Shoshonean. Examples of initial Uto-Aztekan *n* are:

- N. *nē(huāll)* "I"; Cora *ne*, *nī*, *na*, *nu* "ich"; Huich. *ne*: S. P. *nī* "I"; Mono (N. F.) *nū*; Tüb. *nū-gī*; Git. *nū*; Fern. *nu-mū*; Luis. *no*; Cahu. *ne*; Hopi *no*
- N. *nene-pīlli* "tongue"; Cora *nanu*; Huich. *nene*; Tar. *neni*-; Cah. *nini*; Tep. *nunu*: Git. *-nōḡi*; Gabr. *-noḡi*-; Cahu. *-naḡ*. This *n*- appears dissimilated to *l*- in Hopi *leḡi*; Tüb. *lala*-
- N. *neci* "to appear": S. P. *naš'ī-m'i*- "to seem, appear"
- N. *nema* "pas à pas": S. P. *naḡwa*- "track"
- N. *nemi* "to live": S. P. *nīḡwU*- "person," *nīḡwU'a*- "body"
- N. *ne-* reflexive prefix: S. P. *na-* reflexive prefix. This element is probably identical with reciprocal *na-* (of quasi-dual significance) in N. *na-hui* "four"; Huich. *na-u-ka* (from Kroeber), *na-o-ba* (Diguët); Tar. *na-kuo*; Cah. *na-ki*; Hopi *na-leyi* "four" (cf. *leiyi* "two"; similarly N. *-hui*, i. e. *-wi*, and Huich. *-u*-, *-o*- are etymologically identical with N. *o-* of *o-me* "two," S. P. *wā*-, Tüb. *wo*, Cahu. *wi*), *na-vai* "six" (cf. *pahio* "three"), *na-nal* "eight" (cf. *naleyi* "four"); S. P. *na-vai*- "six" (cf. *pai*- "three")
- N. *nacaz-īli* "ear": S. P. *naḡqā-va-φⁱ* "ear"
- N. *noloa* "plier, courber une chose"; Pap. *noh* "to bend": S. P. *noḡḡ-m'i*- "to bend"
- N. *non-qua* "à part": S. P. *nanḡ-š'u*- "by oneself"
- N. *noḡuā* "répandre une chose," *noḡui-ūi* "couler (en parlant d'un liquide)": S. P. *nuḡi*- "to stream, run"

Postvocalic Uto-Aztekan *n* appears in Southern Paiute either as

geminated *-n'-* or, when originally ungeminated, disappears entirely (cf. *-s'-* and *-l'-* as postvocalic forms of Uto-Aztekan *-s-*). Doubtless *-n-* first left its trace as nasalization of preceding vowel, this nasalization itself later disappearing (Uto-Aztekan *-ana-* > *-ga-* > *-aa-* is quite parallel in development to *-ama-* > *-aŋwa-* > *-qwa-* > *-awa-*, e. g., Hopi *dama* "tooth": S. P. *taŋwa-*: Ute *tqwa-*: Mono *-tawā*).

Examples of geminated *-n'-* are:

- N. *mon-ili* "son-in-law"; Cora *muna-ra* "Schwiegervater": S. P. *mon'áts* "son-in-law"
 N. *pani* "en haut, au sommet": S. P. *pa'a-n'i-* "to be high," *pa'ánt'i* "high"
 N. *-pan* "upon"; Cora *ha-poa(n)* "auf, in, über": S. P. *-va'an'* "on, upon"
 N. *-nal-co* "de l'autre côté": S. P. *-n'aŋqwa-* "from (beyond)"
 N. *ni-*, *n-* "I," *no-* "my": S. P. *-n'i-* "I; my, me," Tüb. *-n* "my"; Cahu. *ne-*; Fern. *ne-*, *ni-*
 Cora *vene* "schlagen" (cf. *ve* "schlagen, werfen, schiessen, treffen"): S. P. *wun'ai-* "to throw down"
 Pap. *nūhni* "to fly up, fly away (plur)"; Cora *éni-te* "fliegen, flattern": S. P. *nōnisi-* "to fly" (syncopated and palatalized from **nōn'i-ti-*); Ser. (H.) *hinyi-k*

Examples of S. P. zero developed from intervocalic Uto-Aztekan *-n-* are:

- N. *-ton-ili* "suffixe marquant la petitesse, le mépris" (< **tona-*): S. P. *tua-* "child, son," *-t'ua-*, *-rua-*, *-ntua-* "small, young of" (< **tuna-*)
 N. *min-tonili* "arrière-petit-fils, -petite-fille" (< **mina-*): S. P. *mi'a-* "tiny" (< **mina-*)
 N. *cen-ili* "tige, épi de maïs sec," *a-cecentli* "mauvaise herbe" (< **sene-* ?); Tepecano *hun* "corn"¹ (< **sunī-* ?): S. P. *šii-* "squaw-bush stem used in basketry" (< **šini-*). This etymology assumes that Uto-Aztek **sene-* meant "stalk, stem" originally and that "corn" developed as secondary meaning
 N. *ce(n)* "one"; Tar. *sine-*; Cah. *senu*; Cora *sen* "sicherlich": S. P. *šá-* "one" (< **šuu-* < **šunu-* < **šinu-* ?)
 N. *-huān* "in company with": S. P. *-ŋw'ai-* "in company with" (< **w'ani-*)
 Cahu. *meni-l* "moon": S. P. *múá-ts* "moon" (< **mīna-* ?); Mono (In.) *mūa-ts*; Shik. *mō'a-tsi*; Git. *mūa-tʰ*; Fern. *mōā-t*; Luis. *moi-la*; Hopi *mōya-wo*; Tüb. *mūya-l*. How Shoshonean **mīna-*, **mīa-*, **mīya-* is related to Nahuatl-Sonoran **metša-* is not clear
 N. *paina* "courir vite"; Pap. *wōh-pū* "to run (plur.)": S. P. *pōya-* "to run about" (< **pōina-*)

¹ On Dr Mason's authority.

- N. *pipina* "manger, sucer des cannes à sucre," *pipinia* "s'humecter, s'imprégner d'humidité, en parlant d'un objet": S. P. *piyá-φi* "sap, juice" (< **pina*-; -y- is glide between *i* and *a*)

Another example of S. P. zero < -*n*-, as indicated within Shoshonean itself, may be:

- Mono (In.) *tohina* "deer" (< **tiina*); Ban. *tina* "antelope" (= *tina*); Luis. *ton-la*; A. C. *doni-l* (< **tina*-); Cahu. *teni-l*; S. P. *tiγia* "deer" (< **tiina*-; -γ- is glide), *paria* "elk" = "water-deer" (< **pa-tiina*-)

It is possible that intervocalic -*n*- sometimes disappears also in Papago. An example pointing to this is:

- Pap. *tšūi* "to say" (< **tini*- ?); S. P. *tin'ia* "to tell"

Uto-Aztekan *η*

In Nahuatl and Sonoran *η* is not found, except insofar as *m* and *n* are in Nahuatl assimilated before *k* and *kw* to *η*; this *η*, however, as being purely secondary in origin, does not interest us here. In Southern Paiute and other Shoshonean dialects, however, *η* not only occurs directly before *k*- sounds (in which case it need not be original but may go back to *m* or *n*), but also freely after vowels. In such cases Nahuatl-Sonoran regularly has *n*. This -*η*- does not always occur in all Shoshonean dialects, but is replaced by -*m*- or -*n*- in some. Where Nahuatl-Sonoran *n* corresponds to intervocalic Shoshonean *η* or *m*, I assume, for the present, that we are dealing with Uto-Aztekan *η*, inasmuch as no phonetic circumstances can be defined under which Uto-Aztekan *n* becomes Shoshonean *η* or *m*. It seems plausible to suppose that original *η* would in different dialects shift to *n* or *m*. Uto-Aztekan *η* is parallel to *n* insofar as it appears in Southern Paiute either as *η* (sometimes *m* ?) or zero. It may therefore be assumed that we have original geminated *η* (S. P. -*η*'- or -*η*-) and spirantized *η*, which disappears. Examples of Uto-Aztekan *η* preserved in Southern Paiute are:

- N. *lanquai-tl* "knee"; Cora *tunú*; Pap. *tohnü*; S. P. *taŋa*- "knee"; Mono (In.) -*taŋ*; Shik. -*daŋa*; Tüb. *toŋo*-; Mono (N. F.) -*rana*-; Hopi *dami* (perhaps -*am*- < *-*ɔŋ*-, original *ɔ* labializing *η* to *m*); Git. -*tama*; A. C. -*tami*; Cahu. -*tam'i*. Uto-Aztekan **lɔŋe*-, **lɔŋe*- ?
- N. *ten-tli* "lips, mouth"; Huich. *teni*; Cora *téni*; Pap. *tšihNI*; Fern. -*töŋi*- "mouth"; S. P. *timpa*- "mouth" (-*m*- assimilated to following *p*)

from η). In Shoshone *-dip*, Ban. *-tipá*, Mono (In.) *-töpi*, *-p-* is to be understood as *-p'-* < *-mp-* (cf. Uncompahgre Ute *-p'-* < *-mp-*). Uto-Aztekan **teŋi-*?

Pap. *a'an* "wings," *annü-'ki* "to flap the wings": S. P. *aŋavu-phi* "arm and shoulder" (assimilated from **aŋi-*?). Uto-Aztekan **aŋe-*?

Cora *kin* "der Gatte," *kina* "einen zum Gatten nehmen"; Pap. *kun* "husband": S. P. *qum'a-* "husband" (< **quŋ'a-*, *u* labializing η to *m*?). Uto-Aztekan **koŋa-*?

Without cognate in Southern Paiute, so far as at present known, is:

N. *can-ili* "joue"; Huich. *kana* "front"; Pap. *kam* "cheek" (why *-m-*?): Tüb. *gaŋa-* "beard"; Git. *-qaŋa*; Mono (N. F.) *-ŋan*; Wob. *-gan*. Uto-Aztekan **kaŋa-*?

An example of Uto-Aztekan η corresponding to S. P. zero is:

Huich. *una* "salt"; Cora *úna*; Cah. *ona*; Pap. *on*: S. P. *já-phi* "salt" (< **ŋa-*); Wob. *üma-bi* (*-m-* perhaps labialized from η - because of originally preceding σ); Shik. *oŋa-bi*; Tüb. *uŋa-l*; Fern. *aŋo-r* (metathesis from **oŋa-r* ?); Luis. *eŋ-la*; Cahu. *eŋi-l* (< **ŋa-l*); Hopi *laŋa*. Uto-Aztekan **ŋa-*?

Examples of S. P. zero < η -, based on Shoshonean evidence alone, are:

Gabr. *mama-r* "grass" (assimilated from *maŋa-*? Kroeber analyzes it as reduplicated *ma-mar*): S. P. *maa-vu-* "bush, plant; clothes; thing" ("bush, plant" is probably its primary meaning, as *-vu-* is regularly employed as suffix with plant nouns). Shoshonean **maŋa-*?

Hopi *moŋwi* "chief" (< **moŋi*, *w* being perhaps due to preceding σ): S. P. *moi-* "to lead, act as chief" (< **moŋi-*, which would explain why *moi-* nasalizes following consonants). Shoshonean **moŋi*?

Uto-Aztekan *l*

Uto-Aztekan *l* is not preserved as such in Shoshonean. Where *l* occurs in Shoshonean, as in Tübatulabal, Hopi, and Luiseño-Cahuilla, it is either spirantized from Shoshonean *t* or dissimilated from *n*. Uto-Aztekan *l* and *n* fell together in Shoshonean into *n*; original *l*, which seems nearly always to have been postvocalic, appears regularly in Southern Paiute in geminated form as *-n'-*, only doubtfully in spirantized form as zero. Inasmuch as there is nothing to show that Nahuatl *l* and *n* vary according to purely

phonetic circumstances and as, furthermore, Nahuatl *l* has Sonoran reflexes distinct from those of Nahuatl *n* (Cora *r*; Tarahumare *l*; Cahita *r*; Tepehuane-Tepecano *r*), it seems justifiable to consider Uto-Aztekan *l* as primary and not merely derived from *n*.

Examples of Uto-Aztekan *-l-* corresponding to S. P. (Shoshonean) *-n'-* are:

- N. *coloa* (< **koli-wa*) "doubler, plier une chose; faire des circuits, aller quelque part par des détours," *coli-ui* "pencher, se renverser, se courber, en parlant d'un mur"; Cora *kuré-yi* "kreisen (von Vögeln)," *kuri-pin* "sich auf dem Boden wälzen," *kuri-pua* "einen umherwälzen": S. P. *qōn'i-* "to return, come back by same road." Uto-Aztekan **kōli-* ?
- N. *cal-li* "house" (< **kali-*); Tar. *kali-*; Cah. *kari*: S. P. *qan'i-* "house"; Tüb. *hanī-l*
- N. *col-li* "aïeul, aïeule": S. P. *qun'u-* "great-grandfather"; Ute *qōn'u-* "paternal grandfather." Uto-Aztekan **kōlo-* ?
- N. *çali-ui* "adhérer à une chose," *çali-ui-ni* "gluant, visqueux": S. P. *san'á-p'* "gum"
- N. *-l-li* (< **-li-ili*) suffix making abstract nouns from verb and adjective stems (e. g. *tona-l-li* "ardeur du soleil" < *tona*, *quā-zta-l-li* "blancheur de la tete" < *izta-c* "blanc"), *-li-z-ili* suffix making verbal nouns: S. P. *-n'a-* suffix making verbal nouns
- Cora *kuólreabe* "Adler" (*kuolrea-* < Uto-Aztekan *kwalea-* ?): S. P. *qwān'á-nls'* "eagle." Without *-l-* suffix are N. *quāuh-ili* "eagle": Cahu. *qwaa-l* "hawk (sp.)"; Hopi *kwa-hō* "eagle"
- Tar. *sula* "heart"; Tep. *hura*; Tepecano *hur'*; Tüb. *šuuna-* "heart"; Git. *-xñn*; Fern. *-hñn*; Luis. *-sun*

If the vowel originally following *l* (*n'*) is syncopated in Southern Paiute, *-n'-* appears as that nasal (*m*, *n*, or *ŋ*) which is homorganic with the following consonant; in other words, a nasalized consonant results. Examples are:

- N. *mīmiloa* (< **-mili-wa*) (refl.) "se rebuelca como una bestia" (Carochi): S. P. *miŋqwā-* "(frightened cattle) come out in one bunch" (< **min'i-*)
- N. *-nal-co* "de l'autre côté": S. P. *-n'aŋqwa-* "from beyond" (< **-n'an'-* + unknown vowel, as it is syncopated in both Nahuatl and Southern Paiute)
- N. *-li-* "to, for" in *-li-a* "to, for," *-l-lhuia* "to, for," *-l-tia* causative suffix: S. P. *-ŋqī-* "to, for" (< Uto-Aztekan **-li-ke*, Shoshonean **-n'i-kī*)
- N. *xal-li* "sable, pierre qui se met en poudre": S. P. *siŋwa-mṗv-* "sand, gravel" (< **siwan'-* + unknown vowel, syncopated in both Nahuatl and Southern Paiute)

¹ On Dr Mason's authority.

- N. *uapal-li*, *uapali-il* "planche, petit poutre, bois": S. P. *wi-* + nasalized consonant (< **ɔpini-*)

I have only one example of Uto-Aztekan *-l-* corresponding to S. P. zero:

- N. *ɬolō-ni* "couler avec fracas, en parlant d'un cours d'eau": S. P. *sāa-n'ia-* "to make a noise as of flowing water." Uto-Aztekan **ɬola-*?

Under unknown conditions Uto-Aztekan *-l-* appears as Shoshonean *-t-* (S. P. geminated *-t'-* or spirantized *-r-*). This fact, while it cannot at present be satisfactorily explained, indicates that the treatment of Uto-Aztekan *-l-* was not entirely analogous in Shoshonean to that of *-n-*. Examples are:

- N. *cuilo-ni* "sodomite": S. P. *kwił'u-mpi-* "anus" (nasalized form of suffix perhaps due to earlier form **kwin'u-* < **kwilu-*)
- Cora *hure*, *-xure* "eine Kugel, einen Ball machen" (< **pure* < **pole*): S. P. *pot'ɔ-q'wa-* "to be round" (< **pōt'i-*). Uto-Aztekan **pole-*?
- N. *-lo* passive and impersonal: S. P. *-t'ua-* impersonal suffix
- N. *píloa* "pendre quelqu'un, suspendre" (< **pili-wa*; transitive meaning due to transitive suffix *-wa*): S. P. *puri'ri-* "to hang on to (intr.)" (< **pīti-ti-*). Uto-Aztekan **peli-*?
- N. *pil-li* "child, son, daughter" (< **pili-*): Cora *péri*, *pári* "Sohn, Tochter, Kind (vom Vater gesagt)": A. C. *pulyi-ni-š* "baby" (i. e., *pul'yi-* < **puti-*; A. C. *-l-* is naturally not directly comparable to N. *-l-*). Uto-Aztekan **peli-*, **pali-*?

Uto-Aztekan *w*

Uto-Aztekan *w* generally appears as such in Nahuatl, Sonoran, and Shoshonean. In Nahuatl (where it is written *u* or *hu*) it appears before all vowels but *o* (doubtless original *wo* has become N. *o*). In Cora Uto-Aztekan *w* regularly appears as *v*. Examples of Uto-Aztekan *w* initially are:

- N. *uitzilin* "petit oiseau qui bourdonne": S. P. *witsí-ts'* "bird"; Ser. (H.) *witši-t*
- N. *wi-* verb prefix referring to long objects: S. P. *wi-* verb prefix "with the edge of a long object"
- N. *uillallō-il* "espèce d'oiseau très-allongé, volant peu, mais courant extrêmement vite": S. P. *wut'ša-* "roadrunner"
- N. *uēuē* "vieux, ancien," plur. *uēuet-quē*: S. P. *wī-t'u-š'u-* "long ago"; Ser. (H.) *-wut'* "old (man, woman)"; Hopi *wōx-daka* "old man"
- N. *uei* "big"; Cora *ve* "gross, gross sein"; Tepecano *gī* "big, great":¹ Fern. *wē* "all," *wūpū* "much"; Git. *wūr* "much"; Ser. (H.) *wōr* "much"

- N. *o-me* "two," *o-ppa* "twice" (< **wo-*), *na-hui* "four" (i. e. "duality of twos"; *-wi* "two"); Cora *wá-po* "two"; Tep. *gok-* (< **wo-*); Tepecano *gōk*,¹ Tar. *wo-ka*; Cah. *woi*; S. P. *wā-* "two"; Mono (N. F.) *waha-t*; Tüb. *wo*; Git. *wo*; Luis. *we*'; Cahu. *wi*'
- N. *uetzi* "to fall"; Cora *ve* fallen"; Pap. *kūi* "to fall" (read *gūi*); Tepecano *gīs* "to fall in the water"¹ (< **wīš*), preterit *gīi*: S. P. *wī'i* "to fall"
- N. *ual* "vers ici, par ici": S. P. *waq'i-* "hither"
- Cora *vāte* (sing.), *vāteme* (plur.) "dastehen, vorhanden sein": S. P. *wāηwi-* "to stand (plur.)" (< **wāmi-* ?)
- Cora *ve* "dastehen, vorhanden sein"; Pap. *kūh* "to stand" (read *gūh*); Tepecano *gīgu(k)* "to stop, remain" (plur.):¹ S. P. *wun'i-* "to stand (sing.)" (*-wīn'i-*). S. P. sing. *wī-n'i-*: plur. *wā-ηwi-* < **wā-mi-* agrees strikingly with Cora sing. *ve* (< **we*): plur. *vā-te-me* (< **wā-. . .-me*)
- Cora *ve* "schlagen, werfen, schiessen, treffen," *vene* "schlagen"; Pap. *kūkū* "to whip" (read *gūkū*); Tepecano *gīφ* "to hit with the tail": S. P. *wun'ai-* "to throw down"

Postvocalic Uto-Aztekan *w* regularly becomes S. P. *-ηw-*, Ute *-w-* with nasalization of preceding vowel. From Southern Paiute alone one cannot always tell whether *-ηw-* goes back to *-m-* or *-w-*. Examples of S. P. *-ηw-* < *-w-* are:

- N. *-huān* "in company with": S. P. *-ηw'ai-* "in company with"
- N. *caui-īl* "temps"; Tepecano *ta-k'auw* "yesterday"¹ (< **-kawi?*): S. P. *qiaηwi-* "yesterday" (< **kīawi-*)
- Cora *tevi* "der Mensch, die Person"; Pima *tiwo-t* "man"; Pap. *tšūo-tšū* "man, male"¹ (< **tīwa-*): S. P. *taη'wa-* "man" (< **ta'wa-* < **tī'wa-*); Tüb. *datwa-l*
- Cora *hiwe* "nach einem schreien, brüllen" (< **puwe*): S. P. *puη'wi-* "to make a peeping rat-like noise" (< **pu'wi-*)
- Cora *vīye* "regnen, regnen lassen," *vīyan-ta* "der Ort des Regens," *vī-te* "Regen-götter": S. P. *uηwa-* "to rain" (< **uwa-* < **wīwa-* ?); Mono (In.) *ūwa-l* "rain"; Shik. *uwa-dū* (*ūwa-* = *īwa-*, perhaps dissimilated from *wīwa-*); Cahu. *wewa-l*, *wewi-nyi-š*. How Shoshonean **wīwa-* is related to Cora *vīye-*, *vīya-* is not quite clear. Probably Huich. *pou-houye* "pleuvoir," *ka-ouyé* "il pleuvra" belongs to these forms. Cora *vīye-*, *vīya-* and Huich. *-uye* seem to point to original **weye-*, **weya-* (Huich. *u-* < **we-*; Cora *-ey-* palatalized to *-iy-* ?), which, if dissimilated from **wewe-*, **wewa-*, agrees remarkably with Shoshonean **wīwa-*
- Cora *ta-vé* "aufhängen," *vivir* "aufgehängt sein" (< **-we*, *wīwi-*): S. P. *uηwai-* "to hang" (< **uwa-i-*)

¹ On Dr Mason's authority.

Without known cognate in Southern Paiute is:

Huich. *tagui, tahoui* "poitrine" (i. e. *tawi*); Cora *tabi* (Diguët; = *tavi* < **tawi*):
Cahu. *-tau'*, *-tawh* "breast." Uto-Aztekan **tawi*

In one case that was noted Uto-Aztekan *-w-* corresponds to Luiseño-Cahuilla *-η-*, *-ηw-*:

N. *cihuā-til*, *ço(u)ā-til* "woman": Luis. *šunā-l* "woman"; S. J. C. *šonwā-l*

In Papago and Tepecano original *w* became stopped to *g* (Dolores writes *k*; this *k* sound is, however, evidently phonetically distinct from, more nearly sonant than, original *k*, as indicated by Kroeber's remarks prefaced to Dolores' *Papago Verb Stems* and by its appearance finally as *-κ*, whereas original *k* appears finally as *-hκ*), which, in Tepecano at least, appears as intermediate *-g* when final. For some of my examples I am indebted to Dr Mason. Examples appear above (see N. *uei*, *o-me*, *uetzi*, Cora *ve* "dastehen," *ve* "schlagen"). Further examples are:

Tepecano *ga* "that"¹ (< **wa* < **u-a*): Huich. *hua-na* "là" (read *wa-na* "that-at", *wa-* being derived from demonstrative stem *u-*, see under Uto-Aztekan *o* in Part 1; *-na* is found as suffixed element in several other local adverbs given by Diguët,² e. g. *ma-na* "ici," *cha-na* "là," and in Cora *ma-na* "dort"); S. P. *wa-*, *ua-* (compounded of demonstrative *u-* "that yonder" and element *-a-*) in various local adverbs (e. g. *uá-n'*^u, *wá-n'*^u "there," *ua-t'í-* "being there," *ua-t'uγwa-* "to yon place, through there"), cf. *i(y)ā-*, *i(y)e-* (e. g. *iyé-n'*^u "here, present") from demonstrative *i-* "this here" and *-a-*

Tepecano *gisū-r'* "pithaya, organ cactus"¹ (< Uto-Aztekan **witsō-*): N. *uitz-lli* "épine," *uitzô* "épineux"

Tepecano *gigit* "to tremble (generally with cold)"¹ (< Uto-Aztekan **wiwi-*): Pap. *kikihw'* "to tremble": N. *uiuiō-ca* "trembler de froid"

Tepecano *kua'g* "wood, to gather wood"¹ (< Uto-Aztekan **ku'a-wi-*): N. *quahui-ll* "wood"; Tep. *kwawi*. With Tepecano *-g* cf. *-k*, *-ki* (read probably *-g*, *-gi*) of Pima *kwa-k*, *koka-ki* "wood"

Tepecano *a'āg* "horn"¹ (reduplicated from **āg* < Uto-Aztekan **āwa-*): Cora *awa* "ein Geweih habend"

Tepecano *ba'āg* "eagle"¹ (< Uto-Aztekan **kwa'āw-*): N. *quāuh-lli* "eagle" (< **kwāw-*)

¹ On Dr Mason's authority.

² Diguët, *op. cit.* (see Part 1), pp. 29, 30.

Uto-Aztekan *y*

Examples of initial Uto-Aztekan *y* are:

- N. *yaca-tl* "nose, point"; Tar. *yaxka*; Cah. *yeka*; Pap. *tāhkü*; Tepecano *dāk*:¹
Hopi *yaka* "nose"; S. P. *yaγā*- "end"
- N. *yecoa* "avoir des rapports charnels avec quelqu'un"; possibly also Pap. *tōr* "to copulate"; Tepecano *dom*, preterit *dot*¹ (probably to be understood as *dod*, as Tepecano aspirated *-t* regularly corresponds to Pap. *-ht*, Tepecano intermediate *-d* to Pap. *-t*; reduplicated preterit from **do-* < Uto-Aztekan **yo-*): S. P. *yoγo-* "to copulate"
- N. *yua* "envoyer une personne quelque part, conduire quelqu'un, envoyer un messenger;" Pima *yoa-ka* "to bring": S. P. *yū'a-* "to carry more than one object"
- Cora *yeḡiri*, *yèri* "es ist ein Zugang, Aufstieg da": S. P. *yī-* "doorway"

Examples of postvocalic Uto-Aztekan *y* are:

- N. *ayo-tl* "tortoise": S. P. *'aya-* "turtle"; Cahu. *ayi-l*
- N. *ceya*, *cea*, *cia* "vouloir, consentir, accorder"; Tepecano *hōhi* "to desire"¹
(< **sohi* < **soyi* ?): S. P. *-šuya-* (probably to be understood as *-šiya-*), *-šia-* desiderative suffix (see under Uto-Aztekan *s*)
- N. *-ya* suffix denoting imperfect tense; Tepecano *-dat* imperfect tense²: S. P. *-yī-* suffix denoting present tense (occurs also in narrative past of impersonal: *-p'uaγai-t'ua-yī-*). If this etymology is correct, Uto-Aztekan **-ya*, **-ye* might be understood as having originally had durative significance, without true reference to tense

Original **yuya-* > palatalized **yuyi-* is perhaps dissimilated in Huichol to **uyi-* > **uwi-* in:

- Huich. *ouhoui* (i. e. *uwi*) "glace": Cahu. *yuya-t* "snow, ice," *yuyi-t*; A. C. *ayuyi-'a*, *yūi-t* "snow"; Luis. *yuyi-t*; Fern. *yua'-tā*; Git. *yua-t* (Fern. and Git. *yua-* probably dissimilated from *yuya*)

In Papago, Tepehuane, and Tepecano original *y* became stopped to *d* (Dolores writes *t*, which becomes *tc* before *i*, *ü*, and *u*; this *t—tc* sound is, however, evidently phonetically distinct from, more nearly sonant than, original *t—tc*, as indicated by Kroeber's remarks prefaced to Dolores' *Papago Verb Stems* and by its appearance finally as *-t*, *-tš*, whereas original *t—tc* appears finally as *-ht*, *-htš*), which, in Tepecano at least, appears as intermediate *-d*

¹ On Dr Mason's authority.

when final. For this phonetic law and for some of my examples I am indebted to Dr Mason. Examples appear above (see N. *yaca-tl*, *yecoa*, and *-ya*). Further examples are:

- Pap. *tah* "to fly, to jump" (singular): S. P. *yāš'ī-* "flock flies." This holds only if *t* of Pap. *tah* is to be read as *d*
- Pap. *tšu'ammuh* "to punch with a stick or with the fingers": S. P. *ma-yum'u-k'wi-nqī-* "to nudge with the finger" (*ma-* "with the hand, finger"). This holds only if *tš* < *t* of Pap. *tšu'ammuh* goes back to *d*
- Pap. *tcuh* "to do" (< **du*); Tepecano *dun*, preterit *du* "to make," *do'da* "to do thus": N. *yocaya* "fabriquer"
- Pap. *tšū* *tšī* "to smoke tobacco" (< **dū'di-*); Tepecano *dīn*, preterit *dīp* (doubtless to be understood as *dīd*, reduplicated preterit from **dī-* < Uto-Aztekan **yē-*): N. *ye-tl* "fumée odoriférante, parfum, tabac"
- Tepecano *dūr* "black ant":¹ N. *yoyoli* "insecte," *yolca-tl* "insecte, ver." Uto-Aztekan **yoli-* (for Tepecano *r*: N. *l* see Uto-Aztekan *l*)
- Tepecano *dām*, *a-dim*, preterit *ā-di* "to run, to follow": Cora *yéi(me)* "gehen, wandern" (sing.)

Uto-Aztekan h

This sound is found in neither Nahuatl nor Southern Paiute (though some Southern Paiute forms beginning with pure vowels, that is, not preceded by ', have at times been heard pronounced with weak breath-attack; e. g., *aγa-* was sometimes heard as *'aγa-*). It seems clear, however, from comparative Shoshonean evidence that *h* must be credited to the original consonantic system of Shoshonean. Such Shoshonean examples are:

Hopi *hoxta* "back"; Cahu. *-husa*

Hopi *honauwa* "bear"; Git. *hunat*; Fern. *hūnū-r*; Luis. *hunwo-t*; Cahu. *hunu-t*: Tüb. *una-l* (Tübatulabal *h* seems always to go back to Shoshonean *k*, while Shoshonean *h* disappears)

Moreover, Shoshonean *h* corresponds in a number of cases to Sonoran *h* (Pima, Huichol, Cora, Cahita; this Cora *h* is of course etymologically distinct from Cora *h* < *p*). There is, therefore, good reason to ascribe *h* not only to original Shoshonean but also to original Uto-Aztekan.

Examples of initial Uto-Aztekan *h* are:

N. *itta*, *ithua* "voir quelqu'un, découvrir" (< **ite-wa* ?); Pima *hitšv* "to

¹ On Dr Mason's authority.

- see" (< *hiñi): Gabr. *huta-a* "to see"; Fern. *hūtu*; Git. *-hu*. Uto-Aztekan *hite-, *hote- ?
- N. *aqui* "qui?" *acā* "quelqu'un"; Cora *háí-ki* "was, wie": Cahu. *haxi* "who?" Fern. *hakī*; Wob. *hake*; Shik. *haγa-dū*; Hopi *hak'i*; S. P. *aγa-* "where? how?" Uto-Aztekan *haki, *haka
- N. *oco-tl* "pinus tenuifolia"; Cora *hukú* "Kiefer"; Tepecano *huk* "pine":¹ S. P. *oγo-m̥p̥u-* "fir" (with open *o*; probably *oγo-*). Uto-Aztekan *hokɔ- ?
- N. *èca-tl* "vent, air"; Cora *āka(ri)* "Wind"; Huich. *heheaca* "air": Tüb. *ūxka-wa-l* "wind"; Mono (N. F.) *hig-wa-p̥*; Gabr. *a-hika-ŋ*. Uto-Aztekan *heaka- ?
- N. *i* "to drink"; Cora *i*; Tep. *i-*; Tepecano *iñ*;¹ Pap. *ih*; Tar. *pahi* "to drink" (probably to be analyzed as *pa-* "water" + *-hi* "to drink": S. P. *ivi-* "to drink"; Mono (N. F.) *hibi-*; Shik. *hivi*; Hopi *hii-koo*; Tüb. *iū*. Uto-Aztekan *hi-, *hie-, *hipi-
- Huich. *houca* "jambes"; Cora *houca* (Diguët), *îka* "der Fuss, das Bein, der Knochen" (Preuss); Cah. *huoki*; Hopi *hokya* "leg"; Mono (N. F.) *-huk*; Wob. *-huk*. Uto-Aztekan *hoka-
- Huich. *hou-rou* "flèche"; Cora *î-rî* "Pfeil"; Pap. *u'uh* "war-arrows" (reduplicated form): S. P. *ô'* "arrow"; Hopi *hò-hü*; Luis. *hu-la*; A. C. *hu-l*. Uto-Aztekan *hō-
- Tep. *houam* "jaune"; Pima *oam* "yellow": S. P. *ɔa-q'a-* "to be yellow." Uto-Aztekan *hɔa- ?

Examples of Uto-Aztekan postvocalic *h* are far from numerous:

- N. *yei, ye* "three" (< *hei < *pai < *pahi ?); Cora *wái-ka*; Tar. *bai-ka*; Cah. *bahí*; Pima *vai-*; S. P. *pai-* "three"; Mono (N. F.) *pahi*; Shik. *pahi-t*; Git. *bahí*; Fern. *pahai*; Luis. *pahai*; Tüb. *pai*; Hopi *pahio*. Uto-Aztekan *pahi-
- Huich. *-houjia-na* "devant" (i. e., *-huñia-*): S. P. *-u(w)a'-mi-* "in front of" (*-w-* is glide, *-u(w)i-t'uγwa-* "(moving) in front of" (*-husa- > *-u'a- > -ua'- ?)
- Huich. *touhou* "braise": Ser. (H.) *tuu-* "coal"; Fern. *duu-t*; Cahu. *du-l* is probably not to be interpreted as from Uto-Aztekan *toho-, as intervocalic *h* would be expected to remain in Southern Californian Shoshonean. Huichol *-h-* may have been secondarily introduced (< Uto-Aztekan *too-* ?) to break up the hiatus; or Diguët's *-h-* may be of merely orthographic, not phonetic, significance (cf. Diguët's Cora *mouhou* "head," where Preuss' orthography indicates that *mu'u* is meant)

Uto-Aztekan '

Quite a number of Uto-Aztekan languages, including Nahuatl and Southern Paiute, possess ' (glottal stop) as a definite consonant.

¹ On Dr Mason's authority.

It is somewhat doubtful, however, if there are any true cases of Sonoran or Nahuatl ' corresponding directly to Shoshonean ' ; in other words, the assumption of ' as an original Uto-Aztekan sound must be considered at present as not capable of being completely justified, though indications are not lacking of the soundness of this view. In a large number of cases ' can be shown to be the resultant of some other Uto-Aztekan sound (as in S. P. ' < *s*; N. saltillo < *-t* or *-k*, see below); such cases must, of course, be eliminated here. A small but convincing number of examples shows that widely distant Shoshonean dialects may agree in the use of the glottal stop (e. g., S. P. 'ayĩ- "good," often heard as ^a'ayĩ-: Ser. (H.) *a'aiye-*; S. P. 'i-, ^vi- "this": A. C. *i'i*).

Examples of initial Shoshonean ' in Uto-Aztekan words, where, as far as available material can be relied on, there is no ' to correspond in Nahuatl or Sonoran, are:

Huich. *aĩhotzo* "bien": S. P. 'ayĩ- "good"; Ser. (H.) *a'aiye-tš*

N. *i* "ceci"; Cora *i*, *hi* "dieser"; Pima *hitv* "this"; Tepecano *hidi*.¹ S. P. 'i- "this" ('ištĩ- "this" as absolute inanimate demonstrative < ^{*}'ištĩ-); Shik. *idü* "this"; A. C. *i'i*; Luis. *ivi*. Uto-Aztekan ^{*}'i(*te*) or ^{*}hi(*te*) ?

N. *ayo-tl* "tortoise": S. P. 'aya- "turtle"; Cahu. *ayi-l*

Similar examples of Shoshonean postvocalic or postconsonantal ' are:

Cora *hiwe* "nach einem schreien, brüllen" (< ^{*}puwe); S. P. *puŋ'wi-* "to make a peeping sound" (< ^{*}pu'wi-)

N. *-c-pac* "sur, au-dessus, en haut": S. P. *-v'āγi-* "over" (< ^{*}-p'āki-)

N. *-pan* "upon": S. P. *-v'an'* "on, upon"

N. *pani* "en haut, au sommet": S. P. *pa'an'i-* "to be high"

Cora *tevi* "der Mensch, die Person," Plur. *tāite*; Pima *tiwo-t* "man": S. P. *taŋ'wa-* "man" (< ^{*}ta'wa-); Tüb. *datwa-l* (perhaps *-tw-* is misheard for *-w-*)

N. *-tia* causative suffix; Cora *-te*: S. P. *-t'ui-* causative suffix

Nahuatl ' (saltillo) can be clearly shown to be developed in certain cases from syllabically final *-t* or *-k*, though I am unable to suggest at present under what circumstances this reduction takes place. Examples of N. -' < *-t* are:

¹ On Dr Mason's authority.

- N. *câ* (= *ka'*), *cat-qui* "to be in a place, *cat-yan* "place, siège," *catê* present plural of *câ*; Pima *katšv* "lay" (< **katš*): S. P. *qari-* "to sit, dwell" (< **katš*)
- N. *uêuê* (= *wêwe'*) "vieux, ancien," plural *uêuet-quê*, *no-uêuet-cauh* "mon vieux": Ser. (H.) *-wut* "old" (< **witi*)
- N. *-mê* (= *-me'*) plural noun suffix: Pipil *-mêt* (e. g. N. *matini-mê* plur. "wise": Pipil *matini-mêt*)¹
- N. *-quê* (= *-ke'*) plural noun and verb suffix: Pipil *-quêt* (e. g. N. *chi-huaz-quê* "they will make": Pipil *chihuaz-quêt*)²
- N. *-'* plural noun and verb suffix: Pipil *-t* (e. g. N. *cihuâ* = *siwa-* "women": Pipil reduplicated *cixcihuât-quêt*, with double plural suffix *-t-quêt*; N. *nemî* = *nemi-* "they live": Pipil *nemi-t*)³

It is clear from this last example that N. *-mê*, *-quê*, Pipil *-mêt*, *-quêt* are compound plural suffixes, the plural suffixes **-me*, **-ke* (cf. Southern Paiute *-mî-*, *-q'a-*) being further pluralized by means of *-'*, *-t*; doubtless the analogy of such plural forms as *cihuâ* and *nemî*, *nemî* had much to do with the development of **-me*, **-que* to *-mê* (*-mêt*), *-quê* (*-quêt*).

There is at least one clear example of N. *-'* < *-k*:

- N. *-uâ* (= *-wa'*), *-ê*, *-ô* "having" (e. g. *atla-uâ* "having an *atlâl*," *milê* "having a field," *eqô* "having blood," *uitzô* "having thorns" (forms in *-ê* and *-ô* are doubtless to be analyzed as originally final stem vowels *-e-*, *-o-* + *-'* "having"; this is indicated by such forms as *eco-îl* alongside of *ez-îli* "blood." *-e* spread by analogy from such forms as *cenê* "having *centli* < **sene-*, cf. S. P. *šii-* < **sini-*, in which *-e-* was etymologically justified), *calpole-c* "having a *calpolli*;" older N. *-que-îl(i)* "having" (e. g. *atla-ua-que-îl* "having an *atlâl*");³ Cora *-ke* "to have" (e. g. *pêrike* "ein Kind haben"); Pap. *-kah* "to have or claim": S. P. *-q'ai-*, *-γai-*, *-ηqai-* "to have," *-q'a-ntî-*, *-γa-ntî-*, *-ηqa-ntî-* "having"

Another group of examples of Nahuatl salttillo seems to have arisen as the reflex of a syncopated vowel following immediately upon another vowel. Examples are:

- N. *êca-îl* "vent, air" (< **eaka-*); Cora *âka-ri* "Wind" (*â* contracted from original *ea* ?); Huich. reduplicated *heheaca* "air": Tüb. *ûxka-wa-l* "wind" (*ûxka-* is perhaps to be understood as *û'ka-* < **û'a'ka-* < **ûaka-*;

¹ See W. Lehmann, "Ergebnisse einer Forschungsreise in Mittelamerika und México 1907-1909," *Zeitschrift für Ethnologie*, 1910, p. 730.

² Ibid., pp. 730, 731.

³ Ibid., p. 731.

in S. P., *-ʔq-* often is heard as *-ʔg-*; Gabr. *ahika-η* "wind" (metathesis for **hiaka-*, or is *a-* prefix ?)

- N. *ð-ili* "path, road" (< **oe-* or **oi-* < **hoe-* or **hoi-* < **poe-* or **poi-*); Cora *huyé* "Weg" (< **pɔye-*); Tepecano *voi* "road," plur. *rop'oi*;¹ Pap. *wō-kū* "road, trail" (contracted from **woi-* or **woe* < **pɔi-* or **pɔe-*); S. P. *pō-* "trail" (contracted from **pɔɔ-* < **pɔi-* or **pɔi-*; Shoshone *poe*, *pɔi*; Luis. *pe-i*; Cahu. *pi-t* (contracted from **pɔi-* or less likely **pɔi-*); Hopi *pì-hū* (*i* is long open *i*; contracted from **pɔi-* or less likely **pɔi-*); Bank. *pō-t* (< **pɔi-* or **pɔi-*). Tepecano, Shoshone, Luiseño-Cahuilla, and Hopi point rather to Uto-Aztekan **pɔi-* than **pɔe-* (Cora *huyé* may be **pɔi-* + *-e*, rather than < **pɔe*). It is not improbable that Uto-Aztekan **pɔina* "to run" (N. *paina* "courir vite": S. P. *pōya-*) is a denominative verb in *-na* from **pɔi-* "trail"; in N. *paina*, original *ɔ* has apparently been assimilated to *a* of the suffix, while *i* has had to be retained before *n* (all feeling of connection between N. *ð-ili* and *pai-na* is, of course, gone)
- N. *pì-ili* "elder sister" (< **pia-*): S. P. *pia-* "mother, female" perhaps also in *yōp'ia-* "younger sister"; S. J. C. *-pī-t* "younger sister" (< **pia-t*; if final vowel of stem were originally *i*, we would expect *-š*, not *-t*, as suffix)

This explanation of N. ' may apply also to:

- N. *ilèco* "monter": S. P. *ĩ* "up" (N. *-è-* and S. P. *-ĩ-* both seem to point to Uto-Aztekan *e* + some vowel which has become syncopated in N. and contracted with *ĩ* in S. P.)

In Papago there are numerous examples of ' (e. g., *to'ɪ* "to bet"; *tō'pu* "to twist"; *ha'ah* "jar"; *vā'oh* "wooden tongs for gathering cactus fruit"), but unfortunately in the great majority of cases I do not at present know of Nahuatl or Southern Paiute cognates. In at least two cases Papago has ' where Southern Paiute has none:

Pap. *va'kū* "hole": S. P. *ɔ-p'ag'ĩ-* "hole"

Pap. *-'kah* "to have": S. P. *-q'ai-*, *-γai-*, *-ηgai-* "to have"

Cases of Sonoran or Nahuatl ' corresponding to Shoshonean ' are scanty. The best examples so far noted are:

Huich. *moho* "tête" (i. e. *mo'o*); Cora *mù* "Kopf" (i. e. *mu'u*), Tep. *mahou* "tête" (i. e. *ma'u*); Pima *mā-āka* "head"; Pap. *mo'o*: Tüb. *tso-m'o-* "hair." Uto-Aztekan *mɔ'ɔ-*

Cora *kì* "fressen (von fester Nahrung)" (= *ki'i*, assimilated from **ke'i*); Pap. *kūi* "to bite, sting": S. P. *q'ĩ-* "to bite"

Pap. *tcu'ammuh* "to punch with a stick or with the fingers" (< Uto-Aztekan **yu'amu-*): S. P. *ma-yum'u-k'wi-ηqĩ-* "to nudge with the finger"

¹ On Dr Mason's authority.

stop are found formed from stems beginning with vowels. Papago examples are: *a'an* "wings"; *u'uh* "war arrows"; *o'ohT* "sand" (cf. S. P. unreduplicated *at'a-* "sand"); *u'uhhi'kü* "birds." A Southern Paiute example is *a'dip'atsiη^w* "boys," plural of *dip'ats*.

Many intensives and frequentatives in Nahuatl have a saltillo after the reduplicating syllable, e. g., *ni-pàpāqui* "estoy muy alegre" (*ni-pāqui* "estoy alegre"); *càcahuāntiuh* "en todas partes resuena (fama)."¹ Analogous Southern Paiute examples are: *i'ip'i-* "to sip, drink iteratively" (*ivi-* "to drink"); *a'ampaq'a-* "to talk repeatedly" (*ampaγa-* "to talk"); *a'ap'vi-* "to sleep repeatedly" (*ap'vi-* "to sleep"); *qaq'a'a-* "to sing repeatedly" (*qā-* "to sing").

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¹ See Carochi, pp. 473, 474.